

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by:
Ralph L. Gouge

General Information

Name:	American Sunroof Company
Address:	200 Tobacco Road Bowling Green, KY 42101
Date application received:	January 20, 1998
SIC/Source description:	3714; automobile parts manufacturing
AFS (9-digit) Plant ID:	21-227-00083
EIS #:	105-3960-0083
Application log number:	F527
Permit number:	V-99-005

Application Type/Permit Activity

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
<input type="checkbox"/> Administrative	<input checked="" type="checkbox"/> Title V
<input type="checkbox"/> Minor	<input type="checkbox"/> Synthetic minor
<input type="checkbox"/> Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

Compliance Summary

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

Applicable Requirements list

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input checked="" type="checkbox"/> Other

Miscellaneous

☐ Acid rain source
☐ Source subject to 112(r)
☐ Source applied for federally enforceable emissions cap
☐ Source provided terms for alternative operating scenarios
☐ Source subject to a MACT standard
☐ Source requested case-by-case 112(g) or (j) determination
☐ Application proposes new control technology
☒ Certified by responsible official
☒ Diagrams or drawings included
☐ Confidential business information (CBI) submitted in application
☐ Class I area impacts
☐ Area is non-attainment for:

Emissions Summary

Pollutant	Actual (tpy)	Potential (tpy)
PM10	5.090	5.090
SO ₂	0.006	0.006
NOx	0.210	0.210
CO	0.430	0.430
VOC	235.510	235.510
LEAD	0	0
HAP \geq 10 tpy		
Glycol Ethers	32.71	32.71
Toluene	22.86	22.86
MEK	11.25	11.25
Xylene	27.02	27.02
1,2,4 trimethylbenzene	10.77	10.77

Source Process Description:

This source manufactures fiberglass automobile tops for the automobile industry. The manufacturing process begins with the preform process (an insignificant activity) in which fiberglass sheets are placed in a preform cavity, electrically heated, and formed into the basic top shape. The top and bottom parts are prepared for each top. The formed fiberglass tops are moved to a resin transfer molding (RTM) process (vented to the inside of the building) where the resin is injected into the fiberglass. Four large presses are used to hold and form the tops. After the RTM process is finished the parts are inspected, trimmed and air dried. The top and bottom parts are then placed in a bond cell and glued together. This process is not heated. After the gluing process, sanders remove surface imperfections from the top. The majority of these emissions are fugitive and released into the work environment. The sanding operation is considered an insignificant activity. Next the fiberglass tops go to the surface coating process. A primer is applied to the fiberglass top. There are two booths which apply the primer coating. A couple of bake ovens accompany these booths. After the primer has dried a colorcoat and clearcoat are applied. Again, a bake oven dries these paint applications. The final process is simply the cleanup of the surface coating equipment. The paint equipment consists of the hoses, guns etc. They are cleaned inside and out. The cleaning takes place in the Prime Mix Room and the Paint Mix Room. The fiberglass tops are finally inspected and cleaned and readied for shipping.

Emission and Operating Caps Description:

This source is major for VOC's and for HAP's.
There will not be any operating limitations on this permit.

The RTM process is emission point 01 which consists of four presses. Emissions from this process include VOC and HAP's. These emissions are released to the plant working environment and are fugitive emissions. For all practical purposes the presses are identical to one another.

The sanding operation consists of pneumatic sanders that perform sanding in two areas. One sanding operation occurs in a room with 90% efficiency filtered downdraft exhaust system. The other sanding process occurs in a room with a wall mounted exhaust fan. The sanding meets the definition of an insignificant activity. PM emissions are generated from the sanding operations but are emitted into the work environment.

The Surface Coating application process which includes the primer color and clear coat application is emission point 02. There are four booths, Prime Booth #1 and Prime Booth #2, Color/Clear Booth #1 and

Color/Clear Booth #2 at this point. All the manufactured products are dried in natural gas-fired bake ovens. PM emissions are controlled with a 90% efficiency dry filtered down draft exhaust system. The emissions from this point are PM, VOC and HAPs, and the products of combustion from the natural gas ovens.

The Surface Coating Equipment Cleanup operation is emission point 03. This process involves the cleanup of the surface coating equipment (paint guns, hoses, etc.) inside and outside. This occurs in the Prime Mix Room and the Paint Mix Room. Both these rooms are vented through rooftop stacks. A solvent-based thinner is used to flush the equipment and a lacquer thinner is used to clean the outside of the equipment. Approximately 90% of these cleaners are recovered and either recycled or disposed of. The emissions from this point are VOC and HAP's. The last stages associated with this manufacturing operation involves Final Detailing and Assembly, both of which emit negligible emissions.

This company is located in an attainment area for ozone. There will not be any control equipment on the VOC-emitting affected facilities.

There are several HAP's with emissions greater than 10.0 tons per year (see table above), thus state regulation 401 KAR 63:060, will apply to this facility. However, there is not a MACT standard which will apply to the plant.

There are several natural gas-fired units at this facility. The direct fired units are not subject to regulation. The natural gas-fired boiler (0.350 mmBTU/hr) under this determination is considered an Insignificant Activity (IA).